SIEMENS

Data sheet 6ES7134-4JB50-0AB0

*** SPARE PART*** SIMATIC DP, ELECTRONIC MODULE FOR ET 200S, 2 AI RTD 15 MM WIDE, 15BIT + SIGN PT100 STD; PT100 KL; NI100 STD; NI100 KL; 150 OHM; 300 OHM; 600 OHM, CYCLE TIME 110 MS/CHANNEL WITH LED SF (GROUP FAULT)

Supply voltage	
Load voltage L+	
• Rated value (DC)	24 V; From power module
• Reverse polarity protection	Yes
Input current	
from load voltage L+ (without load), max.	30 mA
from backplane bus 3.3 V DC, max.	10 mA
Output voltage	
Power supply to the transmitters	
• present	Yes
• short-circuit proof	Yes
Power loss	
Power loss, typ.	0.6 W
Address area	
Address space per module	
• Address space per module, max.	4 byte
Analog inputs	

Number of analog inputs	2
permissible input voltage for voltage input (destruction limit), max.	9 V
Constant measurement current for resistance-type transmitter, typ.	1.5 mA
Cycle time (all channels) max.	Number of active channels per module x basic conversion time
Input ranges	
• Resistance thermometer	Yes
• Resistance	Yes
Input ranges (rated values), resistance thermometer	
• Ni 100	Yes; Standard/climate
• Input resistance (Ni 100)	2 000 kΩ
• Pt 100	Yes; Standard/climate
• Input resistance (Pt 100)	2 000 kΩ
Input ranges (rated values), resistors	
• 0 to 150 ohms	Yes
• Input resistance (0 to 150 ohms)	2 000 kΩ
• 0 to 300 ohms	Yes
• Input resistance (0 to 300 ohms)	2 000 kΩ
• 0 to 600 ohms	Yes
• Input resistance (0 to 600 ohms)	2 000 kΩ
Characteristic linearization	
• parameterizable	Yes; for Pt100, Ni100
— for resistance thermometer	Pt100, Ni100
Cable length	
• shielded, max.	200 m

Analog value generation for the inputs	
Measurement principle	integrating
Integration and conversion time/resolution per channel	
• Resolution with overrange (bit including sign), max.	16 bit; 150 ohms: 14 bits; 300, 600 ohms: 15 bits, Pt100, Ni100: 16 bits
• Integration time, parameterizable	Yes
• Integration time (ms)	16,7 / 20 ms
• Interference voltage suppression for interference frequency f1 in Hz	50 / 60 Hz
• Conversion time (per channel)	110 ms; 110 / 130 ms
Smoothing of measured values	
• parameterizable	Yes; In four stages by means of digital filtering
• Step: None	Yes; 1 x cycle time
• Step: low	Yes; 4 x cycle time
• Step: Medium	Yes; 64 x cycle time
• Step: High	Yes; 128 x cycle time

Encoder	
Connection of signal encoders	
• for current measurement as 2-wire transducer	
— Burden of 2-wire transmitter, max.	750 Ω
• for resistance measurement with two-wire connection	Yes; Line resistances are included in the measurement, jumpers on TR
• for resistance measurement with three-wire connection	Yes; Line resistances are included in the measurement, jumpers on TR
• for resistance measurement with four-wire connection	Yes

Errors/accuracies	
Linearity error (relative to input range), (+/-)	0.01 %
Temperature error (relative to input range), (+/-)	0.005 %/K
Crosstalk between the inputs, min.	-50 dB
Repeat accuracy in steady state at 25 °C (relative to input range), (+/-)	0.05 %
Operational error limit in overall temperature range	
• Resistance thermometer, relative to input range, (+/-)	0.6 %
Basic error limit (operational limit at 25 °C)	
• Resistance thermometer, relative to input range, (+/-)	0.4 %
Interference voltage suppression for f = n x (f1 +/- 1 %), f1 = interference frequency	
• Series mode interference (peak value of interference < rated value of input range), min.	70 dB
• Common mode interference (USS < 2.5 V) , min.	90 dB

Isochronous mode	
Isochronous operation (application synchronized up to terminal)	No

Interrupts/diagnostics/status information	
Diagnostic messages	
• Wire-break	Yes; Wire break is detected only on constant current lines
• Group error	Yes
• Overflow/underflow	Yes
Diagnostics indication LED	
• Group error SF (red)	Yes

Parameter	
Remark	4 byte
Diagnostics wire break	Disable/enable (wire break is detected only on constant current lines)

Measurement type/range	deactivated/150 ohms/; 300 ohms/600 ohms/; Pt100 climatic/ Pt100 standard; Ni100 standard / Ni100 climatic
Group diagnostics	Disable / enable
Overflow/underflow	Disable / enable

Potential separation

Potential separation analog inputs	
• between the channels	No
• between the channels and backplane bus	Yes
• Between the channels and load voltage L+	Yes

Permissible potential difference

between MANA and M internally (UISO)	75 V DC/60 V AC

Isolation

Isolation tested with	500 V DC

Dimensions

Width	15 mm
Height	81 mm
Depth	52 mm

Weights

Weight, approx.	40 g

last modified: 03/08/2017